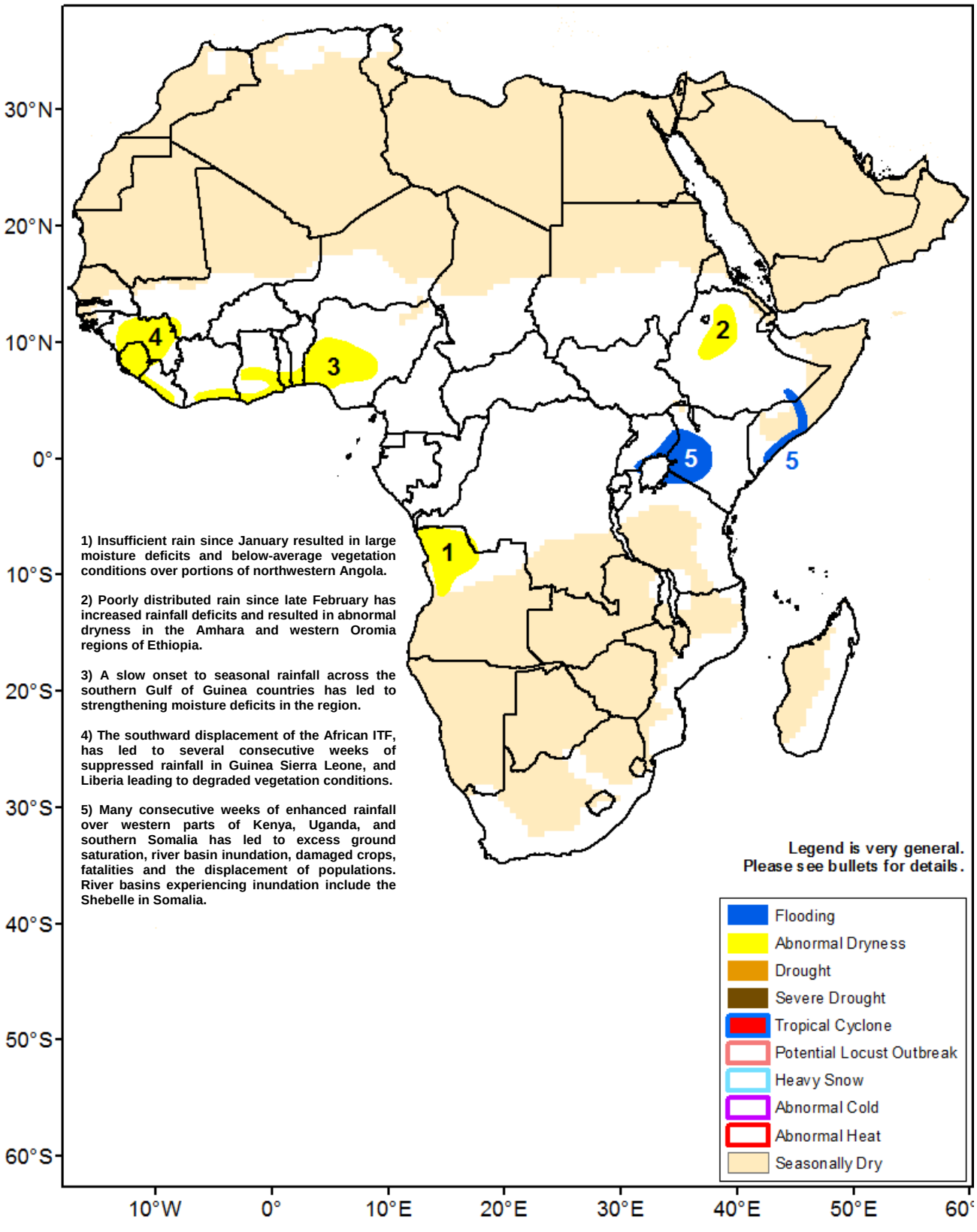
Climate Prediction Center's Africa Hazards Outlook
May 31 – June 6, 2018

- **Yemen and Oman were hard it by Tropical Cyclone Mekunu.**
- **A mixed pattern of above and below normal rains was observed in West Africa.**



Besides severe tropical cyclone impacts on the Arabian Peninsula, heavy rain was also observed in South Sudan

Tropical Cyclone Mekunu made landfall near Salalah, Oman on Friday as a strong tropical cyclone with sustained winds up to 170kph. Oman and neighboring portions of Yemen were hard hit by wind damage and flooding caused by extreme rainfall. A gauge in Salalah measured 278mm of rain, which is nearly 3 times their normal annual rainfall. Satellite estimates indicate that total rainfall of more than 100mm was likely common in the region. Several other parts of the East Africa region received moderate to heavy rains. Many areas of western Kenya, Uganda, South Sudan and western Ethiopia received 25-100mm of rain according to satellite estimates (**Figure 1**). Most of the eastern half of Kenya, along with Somalia and parts of northern and eastern Ethiopia dried out this week. Flooding continues to be a concern for many areas of western Kenya and Uganda that continue to see repeated weeks of enhanced rains. The Shebelle River in Somalia continues to run near flood stage.

Western and, increasingly, northern provinces of Ethiopia exhibit seasonal rainfall deficits. Heavy rains in recent weeks have started to shrink moisture deficits. Still, 30-day moisture deficits in several areas are between 25 and 50mm (**Figure 2**) and less than 50% of normal. Concurrently, vegetation health is degraded in the Amhara as evidenced by the vegetation health index. Some improvement is now evident in western Oromia. Meanwhile in Yemen, the season so far is slightly drier than normal in the east and wetter to the west. However, this appears to have affected vegetation conditions little.

For the upcoming outlook period, models suggest the continuation of heavy and above-normal rainfall over many areas of East Africa. These include Uganda, South Sudan, western Kenya, Rwanda and Western Ethiopia. Local rainfall totals of more than 100mm are likely.

Many parts of West Africa continue to experience an erratic rainfall season.

Mixed rainfall conditions were observed across West Africa during the past 7 days. Some areas of heavier rain, as much as 100mm, were observed in parts of southern Liberia, southern Cote D'Ivoire, and Ghana. Other areas, including Nigeria and Guinea, received yet another week of suppressed rainfall. Most of the rest of the region received around 25mm or less during the period. In Guinea and Sierra Leone, seasonal moisture deficits are growing rapidly and negative anomalies are well greater than 50mm during the 30-day period **(Figure 2**). A poor and delayed start to rains is also being observed in Burkina Faso and southern Mali. VHI indicates that poor rainfall performance is negatively affecting vegetation in these areas. After a period of more ample rainfall, Nigeria has begun to dry out again. This once again raises the risk for moisture stress and adverse effects on vegetation.

During the next week, the forecast calls for a pattern favoring suppressed rains in the region. Cote D'Ivoire, Ghana, Togo, Benin, and western Nigeria are especially likely to experience below-normal rainfall. Many of these areas are likely to receive less than 25mm of rainfall. In far western Africa, a more normal rainfall pattern is expected, but weekly totals are unlikely to be great enough to drastically reduce seasonal moisture deficits.

Satellite Estimated Total Rainfall (mm)
Valid: May 23 – May 29, 2018

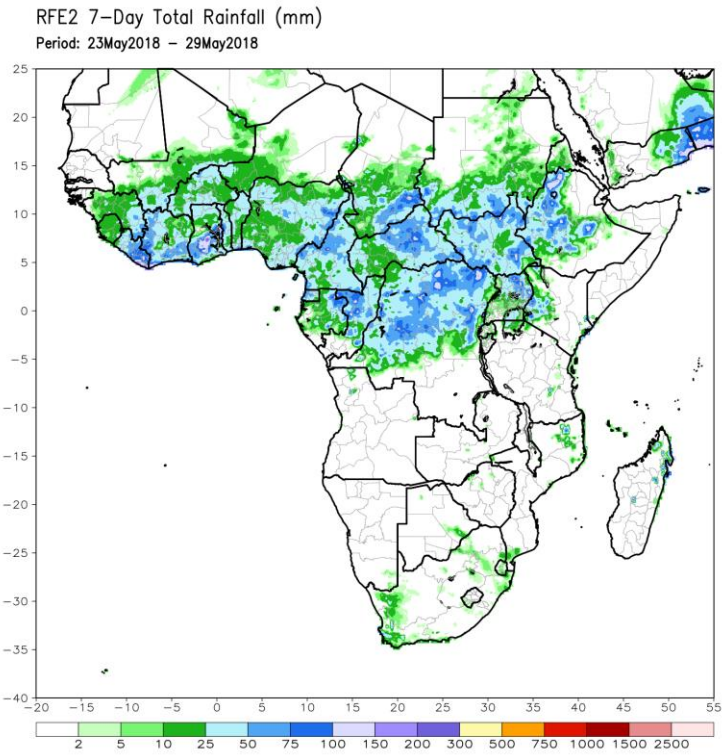


Figure 1: NOAA/CPC

Satellite Estimated Rainfall Anomaly (mm)
Valid: April 30 – May 29, 2018

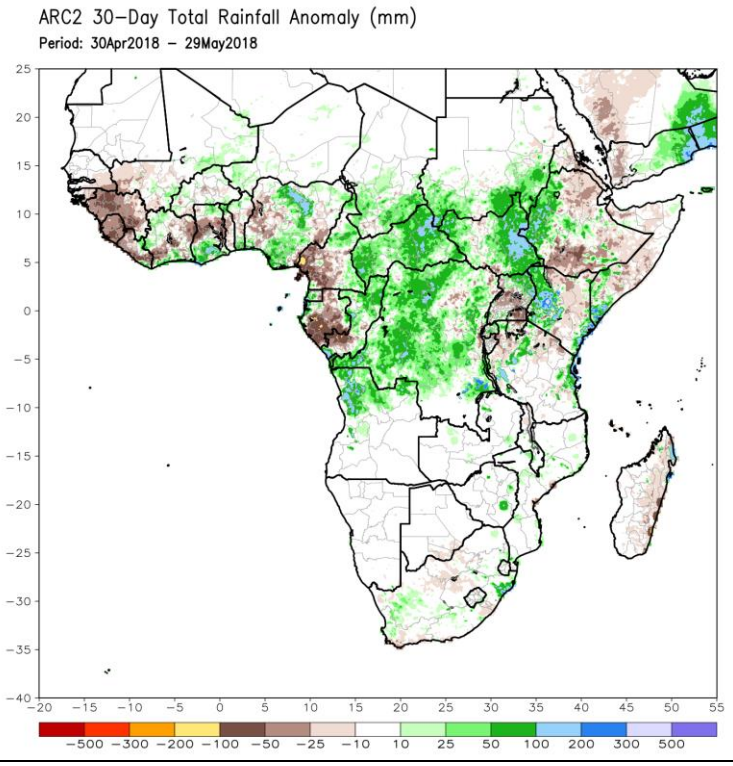


Figure 2: NOAA/CPC

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.